



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/072,081 | 02/06/2002 | Sergey Potekhin | PA2040US | 9465 |
| 29855 | 7590 | 01/12/2005 | EXAMINER | |
| WONG, CABELLO, LUTSCH, RUTHERFORD & BRUCCULERI, P.C. 20333 SH 249 SUITE 600 HOUSTON, TX 77070 | | | AZAD, ABUL K | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2654 | |
| DATE MAILED: 01/12/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/072,081 | POTEKHIN ET AL. | |
| | Examiner | Art Unit | |
| | ABUL K. AZAD | 2654 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 February 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-44 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 06 February 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/8/03</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. Claims 1-44 are pending in this Office Action.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 5 is rejected under 35, U.S.C. 112, first paragraph, because claim 5 recited a single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a recited property, a fact situation comparable to Hyatt is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Botzko et al. (US 6,141,597).

As per claim 1, Botzko teaches, "a control unit for facilitating multipoint communication between a plurality of endpoints, each endpoint including at least a microphone and a speaker, each endpoint being operative to send a compressed audio input signal to the control unit and receive a compressed output signal from the control unit", the control unit comprising:

"at least one audio module, each audio module receiving compressed audio input signals from at least one endpoint and sending compressed audio output signals to at least one endpoint of said plurality of endpoints, each audio module including at least one audio port logical unit, each audio port logical unit being assigned to at least one endpoint within conference and being operative to handle audio signal processing required by the endpoints associated with said audio port logical unit" (Fig. 2C elements 12a and 12 b; Fig. 3A)

"an audio controller logical unit" (Fig. 3A, element 26'); and

"a common interface to route compressed audio streams to and from at least one audio module such that operation of the audio port logical unit eliminates a need for a central audio signal processing logical unit for the conference" (Fig. 2C).

As per claim 2, Botzko teaches, "wherein the audio port logical unit receives the compressed audio input signal and sends the compressed audio output signal to at least one endpoint" (Fig. Site A, B, C and D), each audio port logical unit comprising:

“a decoder that receives the compressed audio input signal from an appropriate endpoint and decodes the compressed audio input signal to form a decoded audio signal; an analyzing and enhancing unit that analyzes the decoded audio signal and sends the decoded audio signal to the common interface” (Fig. 3A, element 18);

“a switch that selects from the common interface decoded audio signals from appropriate audio port logical units” (Fig. 3 A, element 16);

“a mixer that mixes the selected decoded audio signals; and an encoder that encodes an output signal of the mixer and sends an output of the encoder via the common interface to at least one appropriate endpoint” (Fig. 3 A, element 28).

As per claim 3, Botzko teaches, “wherein the analyzing and enhancing unit also enhances the decoded audio signal (Fig. 3 element 26’).

As per claim 4, Botzko teaches, “a system format encoder between the analyzing and enhancing unit and the common interface, said system format encoder receives the decoded audio signal from the analyzing and enhancing unit and encodes the decoded audio signal into a system format and sends the system formatted audio signal to the common interface” (Fig. 2, element 14); and

“a system format decoder between the switch and the mixer, said system format decoder receives a formatted audio signal from the switch and performs an operation that is the inverse of an operation performed by said system format encoder and sends the decoded audio signal to the mixer” (Fig. 2, element 18).

As per claim 5, Botzko teaches, “a plurality of audio ports between which audio signal processing of a conference is distributed” (Fig. 2C).

As per claim 6, Botzko teaches, "wherein the audio signal processing includes mixing of at least one audio signal" (Fig. 3 A, element 28).

As per claim 7, Botzko teaches, "wherein the audio signal processing includes analyzing the audio signal" (Fig. 3A, element 14).

As per claim 8, Botzko teaches, "wherein the audio signal processing includes enhancing the audio signal" (Fig. 3, element 26').

As per claim 9, Botzko teaches, "comprising one or more audio controllers that communicate with the plurality of audio ports to control the mixing" (Fig. 3, element 34).

As per claim 10, Botzko teaches, "wherein the one or more audio controllers form a centralized management system for the conference" (Fig. 3, element 34).

As per claim 11, Botzko teaches, "further comprising a switch that selects which signals will be mixed by a mixer, and is controlled by the one or more audio controllers" (Fig. 3A, elements 16, 28, 34).

As per claim 12, Botzko teaches, "further comprising an encoder for encoding output of the mixer" (Fig. 2, element 14).

As per claim 13, Botzko teaches, "further comprising a common interface that receives output from the encoder" (Fig. 2C).

As per claim 14, Botzko teaches, "further comprising a control buffer for storing control instructions from the one or more audio controllers for the mixer and the switch" (Fig. 3, element 34).

As per claim 15, Botzko teaches, "further comprising a control channel interface for broadcasting control instructions from the one or more audio controllers to the plurality of audio ports" (Fig. 2C).

As per claim 16, Botzko teaches, "further comprising an information channel for broadcasting control information from the plurality of audio ports to the one or more audio controllers" (Fig. 2C).

As per claim 17, Botzko teaches, "wherein the plurality of audio ports further comprise an analyze and enhance unit that analyzes an audio stream; outputs an enhanced audio stream; and outputs control information" (Fig. 2C).

As per claim 18, Botzko teaches, "wherein the plurality of audio ports further comprise a decoder that decodes the audio stream before the audio stream is analyzed" (Fig. 2, element 18).

As per claim 19, Botzko teaches, "further comprising a common interface for carrying compressed audio streams to the plurality of audio ports to be decoded by the decoder" (Fig. 2C).

As per claim 20, Botzko teaches, "wherein the plurality of audio ports further comprises a system format encoder that formats the enhanced audio stream" (Fig. 2C).

As per claim 21, Botzko teaches, "further comprising a common interface for broadcasting the output of the system format encoder to the plurality of audio ports" (Fig. 2C).

As per claims 22-44, they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 1-21.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Abul K. Azad** whose telephone number is **(703) 305-3838**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richemond Dorvil**, can be reached at **(703) 305-9645**.

Any response to this action should be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Or faxed to:

(703) 872-9314

(For informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center's Customer Service Office at telephone number **(703) 306-0377**.


Abul K. Azad

January 10, 2005